

## Response Level

By providing four tiers of response-level training, first responders progressively learn radiological/nuclear response tasks starting with the CTOS Radiological Awareness Level, continuing with Operations Level, Technical Level, and the Management and Planning Level.



**DHS Course #: PER-354**

### Response to Radiological/Nuclear Weapons of Mass Destruction (WMD) Incidents

**Target Audience/Discipline:** Fire Service, Emergency Medical Services (EMS), Hazardous Materials, Law Enforcement, Search and Rescue, State, Local, Territorial and Tribal (SLTT) and first responders that will be assigned to initial response activities to a radiological/nuclear WMD incident.

**Min/Max Enrollment:** 46–54 | **Hours:** 30 hrs/27 contact hours (3 days) | **CEUs:** N/A | **Format:** Resident | **Prerequisites:** AWR-140, *Introduction to Radiological/Nuclear WMD Operations*



This instructor led, drill-based course delivered at the Nevada National Security Site combines individual and team performance skills required in the response to a radiological/nuclear WMD incident. Course materials are presented over a three (3) day period utilizing various learning methods, to include classroom lecture, demonstrations, and hands-on drills. The course culminates in a multi-phased drill event where knowledge, skills, and procedures are applied. To accomplish the objectives of this course, the Participants will learn of the current terrorist threats related to radiological/nuclear WMDs, as well as the characteristics and hazards of Radiation Exposure Devices (REDs), Radiological Dispersal Devices (RDDs), and Improvised Nuclear Devices (INDs), and the related response considerations. Participants will also gain knowledge and skills pertaining to use of radiation detection devices required for the response and safety of the responder.

Training will further include establishing operational zones (both classroom instruction and drill application), Introduction to Radiological/Nuclear WMD Operations (AWR-140), Responder and non-ambulatory decontamination, and use of the Radio-Isotope Identification Device (RIID) for hazard identification (PER-345).

**Course Objectives:** Upon completion of this training course, Participants will be able to:

- Recognize a radiological/nuclear WMD incident and factors to consider when responding to this type of terrorist threat.
- Describe the Personal Protective Equipment (PPE) used at a radiological incident.

- Given a radiological/nuclear WMD scenario, describe how to conduct radiological decontamination for the public.
- Determine the critical need for, and requirement of, establishing zones during a radiological/nuclear WMD incident.
- Explain the employment of the Radio-Isotope Identification Device (RIID) to locate and identify contained and uncontained radiological/nuclear materials.
- Perform an area/facility detection operation.
- Determine the effectiveness of the actions taken in accomplishing the planned response objectives and describe the steps required to terminate the emergency phase of the incident consistent with the Incident Action Plan (IAP).

**Eligibility:** It is the responsibility of the jurisdiction to select course Participants.

**Certificate:** Certificates are issued to attendees upon successful completion of the course.

**Cost:** All training and course materials are provided at no cost to eligible Participants. Funding provided by the Federal Emergency Management Agency/National Preparedness Directorate (FEMA/NPD) U.S. Department of Homeland Security.

**Location:** Nevada National Security Site

**Radioactive Sources:** This course uses actual radioactive materials. It is designed and monitored so Participants receive only minor radiation doses (lower than a chest X-ray or typical roundtrip airline flight across the U.S.).

**Compliance:** This course enhances the competencies defined in National Fire Prevention Association NFPA 472, "Standard for Competence of Responders to Hazardous Materials/WMD Incidents," for responding to specific radiological/nuclear WMD incidents, and augments the responder's knowledge and skills to perform those duties and functions.

**Enrollment Information:** In order to attend this training class or need additional information, please contact CTOS Registration by calling 877.963.2867 or email [ctosreg@nv.doe.gov](mailto:ctosreg@nv.doe.gov).

## Prevention Level

Prevention level courses are designed to improve the nation's capability to detect unauthorized attempts to import, possess, store, develop, or transport nuclear or radiological material for use against the nation.

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### Component Suite of Course:

- 1) PER-243 Personal Radiation Detector (PRD) Course
- 2) PER-245 Secondary Screener/Radiation Isotope Identifier Device Course (SS/RIID)
- 3) PER-246 Primary Screener Backpack Basic Course (PS/BB)
- 4) PER-355 Radiation Instruments Employment

## PRNDOS Preventive Radiological/Nuclear Detection On-Site Program [PREVENTION]

**Target Audience/Discipline:** Fire Service, Hazardous Materials, Law Enforcement, Private Sector/Corporate Security and Safety Professionals, Search and Rescue, Transportation Security

**Min/Max Enrollment:** 25-35 | **Hours:** 28 hours (4 days) | **CEUs:** N/A | **Format:** Resident

| **Prerequisites:** AWR-140 or AWR-140-W, *Introduction to Radiological/Nuclear Weapons of Mass Destruction (WMD) Operations* | **Recommended Prerequisites:** Applicants should be law enforcement and public safety officers from jurisdictions that currently own or are scheduled to receive instruments used for detection and identification of radiological materials.

The Preventive Radiological/Nuclear Detection On-Site Program (PRNDOS) Program offers four of the prevent mission courses in a 4-day training program. It is designed to accommodate responders from agencies unable to host a PRND mobile training team class, or due to attrition only a few responders require the training. PRNDOS enables jurisdictions that cannot train a full complement of students at their location to complete a full suite of PRND courses at CTOS facility at the NNSS.

The classes listed are being offered as 4-days of training for students who are in locations where CTOS cannot train a full complement of students due to not meeting the minimum class size or for jurisdictions who have lost personnel previously trained by CTOS through attrition. Students signing up for these courses are required to attend the full suite of classes if accepted to attend.

**Course Objectives:** Note: Refer to the individual course descriptions for each course listed below.

- **PRD Course (PER-243)** This course focuses on the detection, alarm assessment, locating and mitigation of an event involving radiological/nuclear materials. *[Stand alone course when delivered]*
- **PS/BB Course (PER-246)** This course is designed to train law enforcement and public safety officers to employ department procured and issued backpack radiation detection

systems within the bounds of the jurisdiction/agency operational environment, including local instruments, procedures, and legal considerations. The course provides training and extensive hands-on practice with actual radioactive material so that personnel employing a backpack radiation detection system during detection and interdiction missions can detect, verify, locate, measure, and access potentially illicit radioactive material. *[Stand alone course when delivered]*

- **SS/RIID Course (PER-245)** This course is designed to train law enforcement officers and personnel from other disciplines designated to support law enforcement agencies to perform radiological/nuclear detection secondary screener duties through the employment of radiation isotope identifier devices (RIIDs). The course provides training, which includes extensive hands-on practice utilizing actual radioactive material, to enable personnel assigned as secondary screeners to respond effectively to a request for assistance from a primary screener. *[Stand alone course when delivered]*
- **RIE Course (PER-355)** This course uses a series of drills to reinforce skills of Emergency Responders previously trained to use radiation detection instruments. *[Stand alone course when delivered]*

**Eligibility:** It is the responsibility of the jurisdiction to select course Participants.

**Location:** Nevada National Security Site.

**Radioactive Sources:** This is live agent using real radioactive sources. It is designed and monitored so Participants receive only minor radiation doses (lower than a chest X-ray or typical round-trip airline flight across the U.S.).

**Certificate:** Certificates can be obtained when the student login to [CTOS Web Campus](#) and print the certificate.

**Cost:** All training and course materials are provided at no cost to eligible Participants. Funding provided by the Federal Emergency Management Agency/National Preparedness Directorate (FEMA/NPD) U.S. Department of Homeland Security.

**Compliance:** This course complies with ANSI N42.37-2006, "American National Standard for Training Requirements for Homeland Security Purposes Using Radiation Detector Instrumentation for Interdiction and Prevention."

**Enrollment Information:** In order to attend this training class or need additional information, please contact CTOS Registration by calling 877.963.2867 or email [ctosreg@nv.doe.gov](mailto:ctosreg@nv.doe.gov).